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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
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GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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(54) Title: METHOD FOR INCREASING THE EFFICACY OF AGRICULTURAL CHEMICALS

(57) Abstract: The present invention is directed to increasing the efficacy of agricultural chemicals. This can be achieved by applying at least one agricultural chemical to a plant or plant seed under conditions effective for the agricultural chemical to perform its intended function and applying at least one hypersensitive response elicitor protein or polypeptide to the plant or plant seed under conditions effective to increase the efficacy of the agricultural chemical. Alternatively, the present invention relates to a method for increasing the efficacy of agricultural chemicals by applying an agricultural chemical to a transgenic plants or transgenic seeds transformed with nucleic acid molecule which encodes a hypersensitive response elicitor protein or polypeptide, wherein the agricultural chemical is applied under conditions effective for the agricultural chemical to perform its intended function but with increased efficacy.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/40089

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A01N 63/02  
 US CL : 504/117, 118, 127, 128, 129; 514/2

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 504/117, 118, 127, 128, 129; 514/2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NoneElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,859,324 A (WEI et al) 12 January 1999. See columns 17, 19-20	1-4, 6-8, 15, 18, 48-58, 65, 68, 99-103
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Y		1-103
X	US 6,001,959 A (BAUER et al) 14 December 1999. See columns 4, 12-13.	1-4, 6-8, 15, 18, 48-58, 65, 68, 99-103
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Y		1-103
X	US 6,172,184 B1 (COLLMER et al) 09 January 2001. See columns 1, 2, 11-13.	1-4, 6-8, 15, 18, 48-58, 65, 68, 99-103
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Y		1-103

 Further documents are listed in the continuation of Box C. 

See patent family annex.

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INTERNATIONAL SEARCH REPORT

PCT/US03/40089

**Continuation of B. FIELDS SEARCHED Item 3:**

WEST (USPAT, PGPUBS, DWPI, EPO, JPO): (hyper)sensitiv--, protein, (poly/oligo)peptide, erwinia, pseudomonas-, xanthomonas-, insecticid-, fungicid-, herbicid-, acaricid-, virusid-, nematicid-